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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/308,562	07/16/1999	DUNCAN AKPORIAYE	35/101053	6349

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EXAMINER	
SOUBRA, IMAD	
ART UNIT	PAPER NUMBER
1744	11

DATE MAILED: 04/02/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/308,562	AKPORIAYE ET AL.	
	Examiner	Art Unit	
	Imad Soubra	1744	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *26 February 2002* .

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *18-35* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *18-35* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claims _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are objected to by the Examiner.

11)☒ The proposed drawing correction filed on *26 February 2002* is: a)☒ approved b)☐ disapproved.

12)☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119

13)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____ .

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

14)☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

Attachment(s)

15) ☒ Notice of References Cited (PTO-892)
16) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
17) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ .
18) ☐ Interview Summary (PTO-413) Paper No(s). _____ .
19) ☐ Notice of Informal Patent Application (PTO-152)
20) ☐ Other: .

DETAILED ACTION

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

The factual inquiries set forth in *Graham* **v.** *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

- Determining the scope and contents of the prior art.
- Ascertaining the differences between the prior art and the claims at issue.
- Resolving the level of ordinary skill in the pertinent art.
- Considering objective evidence present in the application indicating obviousness or nonobviousness.

1 Claims 18-21 and 24-35 rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Carter. Carter inherently and/or intrinsically discloses a similar vessel having a block defining plural openings that are closed at one end of said plural openings and are open at another end of said plural openings (figures 6 and 9). Carter teaches that referring to Figure 5, a glass coverslip 23 may be used in the place of the first endcap 26; the coverslip 23 is most readily used in "hanging-drop" vapor diffusion method experiments; acrylic tape (not shown) is used

to secure the coverslip 23 to the housing 12; this orientation provides a more convenient means to observe changes via microscopic examination in the protein solution; when hanging drop method is employed, fluid levels are adjusted to be of equal height in the first 13 and second 14 chambers so that no hydrostatic pressure difference is generated and so that an appropriated volume of vapor phase exists between the protein droplet and the crystallization solution (column 8, lines 54-65). Carter further teaches that a second embodiment of the present invention is illustrated in Figures 6-8 which comprises an apparatus 41 for determining optimum protein crystal growth conditions and for growing protein crystals in either 1 g or microgravity environments; the apparatus 41 comprises a preferably rectangular tray having an upper 42 and lower 44 surface; the tray 42 defines at least one pair of first 46 and second 47 vertically disposed chambers therein for containing first and second crystallization solutions, respectively; the chambers 46, 47 are the same size and shape as that described in the first embodiment; preferably, the tray 42 will include six pairs of chambers 46, 47; the chambers 46, 47 have first 48 and second 49 openings through the upper surface 43 to the exterior of the tray 42, respectively, and first 51 and second 52 orifices through the lower surface 44 to the exterior of the tray 42, respectively (column 10, lines 44-59).

Carter also teaches that the chambers 72, 73 further have first 74 and second 76 openings through the upper surface 69 of the tray 68, respectively, and a first restricted orifice 77 and a second orifice 78 through the lower surface 71 of the tray 68, respectively; in addition, the first chamber 72 further defines a conically shaped portion

79 adjacent or proximal to the first restricted orifice 77 provides a pressure seal for a syringe (not shown) during injection of a gelling substance, which is described in more detail below (column 12, lines 13-23). Carter suggests that the layers of plastic tape 82, the elastomer sheet 84, and the bottom plate 83, are all coextensive with the tray 68 (i.e., the same rectangular size); in addition, the tray 68 should be constructed out of polystyrene, polycarbonate, polysulphone or high molecular weight polyethylene (column 12, lines 54-59). It would have been obvious of one having ordinary skill to determine that the plural openings each have a width-wise dimension, and said block includes plural protruding profiles each with a width-wise dimension that is greater than a corresponding width-wise dimension of said plural openings, with said plural protruding profiles each being of a cross-sectional shape such that when said locking device applies force against said cover member said seal member is forced against said plural protruding profiles such that a pressure tight seal is formed over and around each of said plural openings.

2 Claims 22-23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Carter in view of Cerny et al. Carter fails to disclose the seal member being made from a deformable material. However, Cerny et al use the deformable seal member in their invention. Cerny et al teaches the deformable sealing means is positioned between cap 14 and article retaining means 20 (column 4, line 66- column 5, line 1). The motivation and/or reason for combining the two references would be to prevent liquid held within the cavity from leaking from the disinfecting apparatus when the apparatus is tilted or

turned upside down (column 5, lines 3-5). Therefore, it would have been obvious of one having ordinary skill in the art at the time that the invention was made to incorporate the deformable sealing member of Cerny et al into the device of Carter in order to seal the cavity from the surroundings (column 5, line 1).

Response to Arguments

3. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Conclusion

Any inquiry concerning this communication from the examiner should be directed to Imad Soubra whose telephone number is (703) 305-3541. The examiner can normally be reached on 8:30 am to 4:30 pm. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robert Warden can be reached on (703) 308-2920. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9310 for regular communications and (703) 872-9311 for After Final communications. Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-5665.

Imad Soubra
March 20, 2002

Robert J. Warden, Sr.

ROBERT J. WARDEN, SR.
SUPERVISORY PATENT EXAMINER
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